


# MATERIAL SAFETY DATA SHEET

## Silver (I) Sulfate

<b>NFPA</b> 	<b>HMIS</b> <table border="1"> <tr> <td style="background-color: #00BFFF;">HEALTH</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="background-color: #FF0000;">FLAMMABILITY</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="background-color: #FFFF00;">REACTIVITY</td> <td style="text-align: center;">0</td> </tr> <tr> <td>PERSONAL PROTECTION</td> <td style="text-align: center;">J</td> </tr> </table>	HEALTH	2	FLAMMABILITY	0	REACTIVITY	0	PERSONAL PROTECTION	J
HEALTH	2								
FLAMMABILITY	0								
REACTIVITY	0								
PERSONAL PROTECTION	J								

### 1. Product And Company Identification

<p><b>Supplier</b>                  Colonial Metals, Inc.                  Building 20                  505 Blue Ball Road                  Elkton, MD 21921 United States</p> <p><b>Company Contact:</b> Michael Doss - Dir. of Regulatory Affairs  <b>Telephone Number:</b> 410-398-7200  <b>FAX Number:</b> 410-398-2918  <b>E-Mail:</b> mdoss@colonialmetals.com  <b>Web Site:</b> www.colonialmetals.com</p>	<p><b>Manufacturer</b>                  Colonial Metals, Inc.                  Building 20                  505 Blue Ball Road                  Elkton, MD 21921 United States</p> <p><b>Company Contact:</b> Michael Doss - Dir. of Regulatory Affairs  <b>Telephone Number:</b> 410-398-7200  <b>FAX Number:</b> 410-398-2918  <b>E-Mail:</b> mdoss@colonialmetals.com  <b>Web Site:</b> www.colonialmetals.com</p>
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<p><b>Supplier Emergency Contacts &amp; Phone Number</b>                  Chemtrac: 800-424-9300                  World Wide - Call COLLECT to U.S: 703-527-3887</p>	<p><b>Manufacturer Emergency Contacts &amp; Phone Number</b>                  Chemtrac: 800-424-9300                  World Wide - Call COLLECT to U.S: 703-527-3887</p>
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**Issue Date:** 07/24/2012

**Product Name:** Silver (I) Sulfate  
**Chemical Name:** Silver Sulfate  
**CAS Number:** 10294-26-5  
**Chemical Family:** Metal Halide  
**Chemical Formula:** Ag<sub>2</sub>O<sub>4</sub>S  
**MSDS Number:** 605563  
**Product Code:** 9013

**Synonyms**  
 Sulfuric Acid, disilver (1+) salt

### 2. Composition/Information On Ingredients

Ingredient Name	CAS Number	Percent Of Total Weight
Silver (I) Sulfate	10294-26-5	98 - 100

### EMERGENCY OVERVIEW

Irritant

# MATERIAL SAFETY DATA SHEET

## Silver (I) Sulfate

### Hazards Identification (Pictograms)



### 3. Hazards Identification

#### Primary Routes(s) Of Entry

Eye: Likely  
Inhalation: Likely  
Skin: Likely  
Ingestion: Likely

#### Eye Hazards

H319 - Causes serious eye irritation

#### Skin Hazards

H315 - Causes skin irritation  
May be harmful if absorbed through the skin.

#### Ingestion Hazards

May be harmful if swallowed.

#### Inhalation Hazards

H335 - Causes respiratory tract irritation  
May be harmful if inhaled.

#### Conditions Aggravated By Exposure

May cause argyria (a slate-gray or bluish discoloration of the skin and deep tissues due to the deposit of insoluble albuminate of silver).

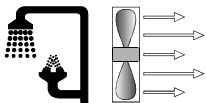
#### Conditions Aggravated By Overexposure

Prolonged or repeated inhalation, application or ingestion of silver compounds may cause a permanent bluish discoloration of the skin and mucous membranes.

#### GHS Classifications:

Skin Irritation - Category 2  
Eye Irritation - Category 2A  
Specific Target Organ Toxicity - Single Exposure - Category 3  
Acute Aquatic Toxicity - Category 1

### First Aid (Pictograms)



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## Silver (I) Sulfate

### 4. First Aid Measures

#### Eye

Flush for 15 minutes with plenty of water. If discomfort occurs or persists, contact a physician immediately.

#### Skin

Wash with soap and plenty of water. If discomfort occurs or persists, contact a physician immediately. Remove contaminated clothing and shoes and wash before reuse.

#### Ingestion

Wash out mouth with water provided victim is conscious. Never give anything by mouth to an unconscious person. Contact a physician immediately.

#### Inhalation

Remove to fresh air immediately. If victim is not breathing perform artificial respiration. Contact a physician immediately.

### Fire Fighting (Pictograms)



### 5. Fire Fighting Measures

Flash Point: N/A °F N/A °C

Flash Point Method: N/A

Autoignition Point: N/A °F N/A °C

Flammability Class: NA

Lower Explosive Limit: N/A

Upper Explosive Limit: N/A

#### Fire And Explosion Hazards

Use proper safety equipment. Can decompose to emit toxic fumes under fire conditions (Sulphur Oxides, Silver Oxides)

#### Extinguishing Media

Use water spray, carbon dioxide, dry chemical powder, or appropriate foam.

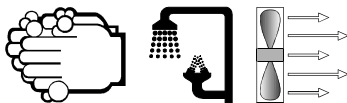
#### Fire Fighting Instructions

Use NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

### 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Avoid dust formation. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or sweeping may be used to avoid dust dispersal.

### Handling & Storage (Pictograms)



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## Silver (I) Sulfate

### 7. Handling And Storage

#### Handling And Storage Precautions

Avoid contact with skin & eyes.  
Avoid forming dust  
Use only with adequate ventilation  
Wash thoroughly after handling

#### Handling Precautions

Avoid contact with eyes and skin. Avoid the formation of dust and aerosols. Use with adequate ventilation.

#### Storage Precautions

Keep in a tightly sealed container in a cool, dry, well ventilated place.

#### Work/Hygienic Practices

Use good personal hygiene. Wash thoroughly with soap and water after handling.  
Light sensitive.

#### Protective Clothing (Pictograms)



### 8. Exposure Controls/Personal Protection

#### Engineering Controls

**Ventilation:** **Local Exhaust:** Required in handling area  
**Mechanical:** Desirable to insure concentration of material below TLV/TWA levels  
**Other:** Closed Ventilation system (Laboratory Fume Hood)

#### **Safety shower and eyewash**

#### Eye/Face Protection

ANSI approved safety glasses/goggles

#### Skin Protection

Rubber/Neoprene (use compatible chemical-resistant gloves)  
Impervious Clothing

#### Respiratory Protection

NIOSH approved chemical cartridge respirator for dust/mist/fume/radionuclide or self-contained breathing apparatus with full face shield.

#### Other/General Protection

Lab coat/apron, flame and chemical resistant protective clothing, eye wash, safety shower, and hygiene facilities for washing.

### 9. Physical And Chemical Properties

#### Appearance

Colorless to white crystals or crystalline powder.

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## Silver (I) Sulfate

### 9. Physical And Chemical Properties - Continued

**Odor**

No Data Available

**Chemical Type:** Mixture

**Physical State:** Solid

**Melting Point:** 1206 °F 652 °C

**Boiling Point:** 1985 °F 1085 °C

**Specific Gravity:** 5.45 @ 29 degree C

**Molecular Weight:** 311.8 g/mol

**Vapor Density:** 5.450 g/cm3

**pH Factor:** N/A

**Solubility:** Partly soluble

### 10. Stability And Reactivity

**Stability:** Stable

**Hazardous Polymerization:** Will not occur

**Conditions To Avoid (Stability)**

Exposure to light.

**Incompatible Materials**

Strong oxidizing agents.

**Hazardous Decomposition Products**

Sulfur oxides, silver/silver oxides.

### 11. Toxicological Information

To the best of our knowledge, the chemical, the physical, and toxicological properties of this compound have not been thoroughly investigated.

### 12. Ecological Information

**Acute Toxicity - Fish And Invertebrates**

EC50: Daphnia- 0.004 mg/l- 48h

**Environmental Fate Information**

Very Toxic to Aquatic Life

### 13. Disposal Considerations

Consult Federal EPA, State and local regulations for proper disposal/recycle/reclamation

NOTE: Chemical additions, processing, or otherwise altering this material may make the waste management information presented above incomplete, inaccurate, or otherwise inappropriate.

### 14. Transport Information

**Proper Shipping Name**

Environmentally Hazardous Substance , Solid, N.O.S. (Disilver (1+) Sulfate)

**Hazard Class**

9

**DOT Identification Number**

3077

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## Silver (I) Sulfate

### 14. Transport Information - Continued

#### DOT Shipping Label

Environmentally Hazardous Substance , Solid, N.O.S. (Disilver (1+) Sulfate)

#### Packaging Requirements

Packaging Group III

#### Additional Shipping Paper Description

**IATA:** Class 3077; Class 9; Group III - Environmentally Hazardous Substance, Solid, N.O.S.

Always consult IATA manual before shipping.

### 15. Regulatory Information

#### U.S. Regulatory Information

This product is TSCA listed.

#### SARA Hazard Classes

Acute Health Hazard

SARA Title III - Section 313 Form "R"/TRI Reportable Chemical

#### SARA Section 313 Notification

Disilver (1+) sulphate CAS-No.: 10294-26-5

#### Canadian Regulatory Information

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

#### European Union (EU) Regulatory Information

Symbol of Danger: Xi

Indication of Danger: Irritant

R: 36/37/38

Risk of Statements: Irritating to eyes, respiratory system, and skin

S: 26 36

Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable protective clothing.

R50 - Very toxic to aquatic organisms

#### Right-To-Know (Pictograms)



#### NFPA



#### HMIS

HEALTH	2
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	J

# MATERIAL SAFETY DATA SHEET

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### 16. Other Information

#### Precautionary Label

Irritant

#### Revision/Preparer Information

MSDS Preparer: Michael W. Doss - Dir Reg Affairs

MSDS Preparer Phone Number: 410-398-7200 115

This MSDS Supersedes A Previous MSDS Dated: 03/04/2009

#### Reference Documentation

The following were the primary references used in the creation of this MSDS:  
CAMEO, ERG, On Site Chemists; CMI SOP's

#### Disclaimer

In compliance with the OSHA Hazard Communication Standard, 29 C.F.R 1910.1200, we are providing you with a Materials Safety Data Sheet (MSDS) for the hazardous material you are purchasing.

It is your responsibility to educate your employees on the safe use of the hazardous material. With this in mind, a copy should be forwarded to the supervisor of the user or to the user themselves, and copy should be retained in your files for future reference.

Colonial Metals, Inc. makes no presentation as to the accuracy of the information in the MSDS. The information is believed to be correct; however, you (the customer), should perform your own investigation and independent verification. If you resell the product, you are responsible to forward the information in the MSDS to your customer.

**Colonial Metals, Inc.**

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